Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of	)	
	)	
Computer III Further Remand Proceedings:	)	**CC Docket No. 95-20**
	)	
Bell Operating Company Provision of Enhanced Services	)	

COMMENTS

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I. INTRODUCTION

The initiation of this proceeding provides the opportunity to review the nonstructural access safeguards which are intended to provide protection against BOC access discrimination. The Commission asks through this proceeding for evidence as to whether the current Computer III regime of non-structural safeguards provide sufficient protection.

GeoNet Limited, L.P. is pleased to submit its comments on the matter, offering its experience as an Enhanced Service Provider (ESP) seeking to obtain non-discriminatory access, as evidence of the effectiveness of the current safeguards. We offer in our comments suggestions as to how the safeguards might be improved to serve the public interest.

All of the matters discussed in these comments relate to the manner in which ESPs are enabled to develop new enhanced services using new technologies being employed in the evolving US telecommunications infrastructure. The importance of these new technologies is summarized in the National Telecommunications and Information Administration Infrastructure Report, "Telecommunications in the Age of Information," page 3:

"The Information Age is upon us , but we have seen only a glimpse of its ultimate outlines. Developments in the information processing industry, such as the steady acceleration of computing speed and power, and the rapid diffusion of computers among businesses and households, have opened economic and social vistas unimagined even twenty years ago. With the cost of information processing power dropping by some 50 percent every year, it seems likely that the impressive accomplishments of the past ten years merely foreshadow more spectacular achievements in the future. However, the full potential of the Information Age cannot be realized simply by continued increases in society's ability to manipulate, process, and create information. The power to manipulate information in fractions of seconds is useful only to the extent that it provides ready access to information in a usable, understandable form. Businesses can take advantage of their enhanced capacity for processing information only if that information can be distributed quickly and economically among their many plants and offices. Society can benefit from the creation of ideas only if they can be disseminated throughout the population, thus providing the spark for further creativity.

In short, although the power to create and manipulate information is critical to capturing the promise of the Information Age, so also is the ability to move that information from point to point. This latter capability is, of course, provided by telecommunications, and it is why the U.S. telecommunications infrastructure is commonly referred to as the "highway" of the Information Age. It is also why the current and future state of that infrastructure is of increasing concern to policymakers at all levels of government."

GeoNet submits that it will be, in large part, the data networking enhanced services created by the ESPs which will enable the use of the new technologies to increase the capability and network efficiency for moving information from point to point. Considering the importance of that objective, it is clearly in the public interest to encourage the ESP's to fulfill that role and to create an environment which facilitates that process.

II. BACKGROUND

GeoNet operates a line of business which has as its objective the development of certain enhanced telecommunications services. Those enhanced services are intended to provide more efficient, cost effective and reliable network interconnection management for enterprise computer networks. The design and development of those services is in process at this time with the design goal being the most effective use of new technologies such as Signalling System #7 (SS7), Integrated Services Digital Network

(ISDN), and the Advanced Intelligent Network (AIN) to manage networked computer applications. GeoNet must have an intimate understanding of the network architecture plans of the network providers with respect to those new technologies in order to fully meet that goal.

The enhanced services under development by GeoNet will apply to nationwide or global, as well as local or regional, enterprise computer networks. With that in mind, GeoNet brought its needs as an Enhanced Service Provider (ESP) to the Information Industry Liaison Committee (IILC) in December 1993 with the objective of achieving a uniform national consensus solution to its need for ESP access to the public switched network. The IILC accepted the GeoNet matter as IILC Issue #044, "Advanced Intelligent Network (AIN) Access by Non-LEC Resource Element". After fifteen months of working Issue #044 , the issue has been placed on hold, pending consideration of a new status designation, "No National Agreement".

Since ISDN will be an important component of the GeoNet enhanced services, GeoNet attempted in December 1994 to reactivate and refine IILC Issue #032, "Information for ISDN Services", with the objective of defining and including ISDN based services as ONA services. Issue #032 had been withdrawn previously for lack of follow-up by the originator. The attempt to reactivate the revised issue was not successful at the December, 1994 IILC meeting since the proposed issue was not accepted by the IILC as written by GeoNet.

It was suggested to GeoNet that the Local Exchange Carrier (LEC) members of the IILC would resist classifying ISDN basic services and service elements and adding them to the list of ONA services. Since GeoNet's immediate need was to obtain ISDN technical, deployment and tariff information in a uniform and consistent format from all LECs, GeoNet agreed to resubmit the issue, worded without reference to ONA. The reworded issue was provisionally accepted at the subsequent IILC meeting as IILC Issue #055P, over the objections of NYNEX and Southwestern Bell. Issue #055P in its present form has the potential to satisfy GeoNet's current need.

III. THE EFFECTIVENESS OF THE IILC AS THE INDUSTRY FORUM FOR ONA ISSUES

In Memorandum Opinion and Order FCC 88-381, paragraph 52, the Commission stated, "We believe that the IILC's work in ONA is useful and should continue. The IILC adequately addresses the stated needs of the parties as an industry forum for ONA issues. The IILC recently adopted bylaws and procedures that reflect a commitment to fair representation of all industry segments. All meetings are open to the public, and decisions are reached through "consensus". Although the IILC Chairperson is an ECSA member, one ECSA member and one non-ECSA member co-chair all IILC committees and subcommittees. The Interindustry Advisory Group (IAG) the IILC's executive arm, has nine seats divided among LECs, IXCs, ESPs, manufacturers, and end users, and is also co-chaired by one ECSA and one non-ECSA

member." The Commission concludes paragraph 53 with the statement, " Because IILC appears to be functioning well, we believe that it is the proper forum to address and, to the extent possible, resolve uniformity issues."

It is GeoNet's experience that there are three flaws in the IILC process which may prevent the IILC from satisfactorily resolving some ESP technical issues which are brought before it. These flaws are related to the acceptance of issues, the "voluntary" nature of LEC participation, and the meaning of IILC consensus.

A. IILC Acceptance of Issues

In paragraph 51 of FCC 88-381, the Commission stated that some parties expressed reservations about the IILC based on a concern that the IILC was dominated by carrier interests. GeoNet's experience indicates that such a concern is justified with respect to the IILC process as it is practiced in the acceptance of issues. The acceptance of IILC Issue #055P illustrates the problem.

In the original issue identification form submitted by GeoNet at the December, 1994 IILC meeting, it was requested that ISDN services be defined, categorized and included in the ONA Services Users Guide. The issue identification form accepted as Issue #055P has no reference to ONA. The result of the issue acceptance process in this case is to eliminate any record in the issue documents

that a request for ONA classification of ISDN services has been received by the IILC. The ratio of attendance of LECs to ESPs at IILC meetings is likely in excess of three to one. It is clear that achieving consensus to accept an issue (even on a provisional basis), without changing the wording to satisfy the LECs, can be dominated by the LECs. GeoNet submits that the evidence indicates that is what happened in the December, 1994 meeting. The IILC process appears to allow the carriers to dominate the issue acceptance process.

B. LEC Participation in the IILC

In paragraph 374 of FCC 88-381, the Commission discusses IBM's comments, stating "IBM, for example, argues that we have made clear that the promise of ONA lies in the development of a new network "architecture" or "design" that will be hospitable to the competitive offering of enhanced services, but that the ONA plans focus instead on the pricing and availability of functions that the carriers already offer. It asserts that the BOCs do not describe how they intend to develop and implement future network technologies, and it concludes that the BOCs plans resemble mere collections of CEI plans. IBM contends that we need to know not only what technologies the BOCs will deploy in the future, but also whether these technologies will be made available to ESPs "on a ubiquitous, technologically uniform, and non-discriminatory basis". IBM contends that the

BOCs are presently developing, testing, and, in some cases, implementing a variety of technologically sophisticated network capabilities that promise greatly increased signalling capabilities and network intelligence based on the implementation of CCS7, ISDN, and Intelligent Network features. It claims that the ONA plans themselves demonstrate that the BOCs are capable of describing at least the initial features of the new network designs that the carriers proposed to implement." . . .

"IBM concludes that the BOCs need not withhold such descriptions until they are actually ready to implement new network functions, and it further argues that delay in submitting such descriptions could enable the BOCs to hide the proposed changes until they have already made their future network design decisions and implemented their new network technologies. If this happens, it would be too late to change those plans."

GeoNet's experience in the IILC process gives evidence of the validity of IBM's predictions. The previous discussion of the IILC acceptance process shows that the reluctance of the LECs to include new technologies such as ISDN in ONA still persists to this day. GeoNet's experience in Issue #044 gives evidence that such reluctance has an even more harmful impact on the IILC process with respect to the nature of the LEC participation in the IILC process.

In the process of trying to describe the Issue #044 access requirements in terms which relate to LEC network architecture, the Issue #044 task group requested contributions from the LECs describing their AIN architecture plans as they relate to Issue #044. Five of the BOCs and one other LEC offered no technical contributions after one year of working the issue. Intense discussions resulted from repeated requests for AIN network architecture technical contributions. When GeoNet informed the IILC Interindustry Advisory Group (IAG) of its concerns, the matter was subsequently discussed on an IAG conference call. According to the minutes of the conference call, one LEC representative commented and "other IAG participants agreed" "that the [IILC issue] process is not diminished in any way should a company choose not to contribute to the process".

After six of the eight Tier 1 companies chose not to make AIN architecture technical contributions to the IILC Issue #044 process, GeoNet became convinced that it would not be possible at this time to describe the Issue #044 AIN access requirements in terms which relate to the AIN network architectures being planned by the LECs. GeoNet submits that the IILC Issue #044 process is evidence which validates IBM's concerns. By withholding the descriptions of the new network designs until they are ready to implement new network functions, it will be too late to easily accommodate GeoNet's ESP requirements into their designs.

The "voluntary" nature of LEC participation is construed to mean that participation in a task group without making any technical contribution is an acceptable level of participation by Tier 1 companies in the IILC process.

C. The Meaning of IILC Consensus

Since the Commission has stated its belief that the IILC "is the proper forum to address and, to the extent possible, resolve uniformity issues", it is important to understand what is meant (or not meant) by consensus resolution of an issue in the IILC. This is particularly true for complex technical issues which relate to new technology being planned by the LECs. After one and a half years working such an issue at the IILC, it is GeoNet's understanding that consensus on such an issue does not necessarily mean that any of the LEC participants in the issue have committed their LEC to implement the solution which is proposed in the recommendations of the issue resolution. In fact, it is GeoNet's conclusion that, for the majority of the LECs on an issue task group, the LEC network planning and engineering have not reviewed the issue as it relates to their network planning. In the case of Issue #044, such a situation would indicate that significant time, effort and resources have been spent to produce a consensus solution which does not necessarily relate to the reality of the evolving network. However, the impact on the ESP could be even more harmful than merely the nonproductive expenditure of time, effort and resources. If the ESP creates a

business plan based on the consensus solution, with market projections which assume a national market for the enhanced service, the results could be fatal for that line of business. The years of delay and the extent of the product redesign necessary to achieve a national market would not be tolerable for many enhanced services. The definition of IILC task group consensus is construed to mean that a recommended IILC issue solution could be one which no Tier 1 company intends to implement. In fact, the solution could be one which none of the Tier 1 company architecture plans will accommodate.

IV. THE USEFULNESS OF THE 120 DAY PROCESS

In paragraph 22 of the Notice requesting these comments, the Commission states that, after the IILC process, "ESPs can take the information to a specific BOC and request the service under the 120 day process".

GeoNet's experience is that the IILC process followed by the 120 day process may work well for ESP service requests involving existing technology but that the process does not work well for ESP requests involving new technologies. Two LECs suggested that GeoNet might enter 120 day requests while the IILC issue was in process. In one case the 120 day request was terminated by the LEC because the 120 day process required application description information and market projections from GeoNet which could only be delivered under terms of non-disclosure. In the other case the 120 day request has been inactive for several months because of the nature of the interaction between

the IILC process and the 120 day process. That interaction relates to the technical description required by the LEC as input to the 120 day process. For services using only existing technologies, technical descriptions generally are easy to develop and provide adequate descriptions of the service access request to enable the LEC to make a business decision on providing the requested access (providing that the market evaluation is favorable).

In the above example, no adequate technical description could be developed without the cooperation and assistance of the Issue #044 task group. The technical input from the LECs was needed to relate the service request to the evolving network so that a technical description could be developed. Without that technical description, the input requirements of the 120 day process could not be met.

Thus, GeoNet's experience indicates that, for services involving new technology, the 120 day process is totally dependent on the effectiveness of the IILC process and the effectiveness of the IILC process is totally dependent on the willingness of the LECs to provide technical information on the LEC's network architecture plans relating to the technologies involved in the requested service. Thus the 120 day process in this case is dependent on the LECs' willingness to disclose new technology network architecture plans and technical descriptions.

V. THE RELEVANCE OF MARKET TRIALS TO THE IILC PROCESS

In Memorandum Opinion and Order DA88-2058, paragraph 46, the Commission defines the specific conditions for an enhanced service market trial. One of the conditions listed is that ESPs must be informed of trials ninety days in advance. GeoNet submits that the public interest would be served if the LECs proposing such trials were required to also notify the respective IILC task groups which are working issues related to new technologies involved in the proposed trials.

GeoNet's experience in Issue #044 provides an illustration of the relevance of such market trials to the IILC process. As previously discussed five of the BOCs and the other LEC offered no network architecture technical contributions after one year of working the issue. However, one of the LECs conducted one or more market trials of AIN during this period. Even after making a presentation on the trial(s) at an IILC meeting, the LEC still declined to contribute technical information concerning the trial(s) to the Issue #044 Task Group.

Having no information from the LECs describing their AIN network architecture plans, the task group could use the market trial description to gain insight into the evolving network architecture. GeoNet believes that the market trial technical information could make a significant contribution to the task group's understanding of the evolving public network, and that the IILC process is diminished for lack of such information.

VI. SUMMARY AND CONCLUSIONS

In order to encourage ESPs to fulfill their role of creating the enhanced services which will enable our society to realize the full potential of the Information Age, we must create an environment which is supportive of the ESP efforts. The IILC, as the forum recommended by the Commission to resolve uniformity issues, is a key element of that environment.

GeoNet's experience in the IILC process provides evidence that certain flaws in the process severely restrict the ability of the ESPs to resolve uniformity issues relating to enhanced services which are intended to employ new technologies such as SS7, ISDN and AIN. Those flaws include the IILC procedure for acceptance of issues, the "voluntary" nature of LEC participation in the IILC, and the meaning of IILC issue resolution consensus. Unless and until the flaws are corrected, the effectiveness of the IILC to resolve uniformity issues relating to new technology will be severely limited. For uniformity issues relating to new technology, the usefulness of the 120 day process depends on the effectiveness of the IILC process. GeoNet's experience with the 120 day process provides evidence that the dependency is limited by the willingness of the LECs to disclose network architecture plans and technical descriptions for the new technologies.

In conclusion, GeoNet asserts that most of the flaws experienced by GeoNet in the IILC and 120 day processes relate to the central issue of *disclosure*. Since

the Tier 1 companies have been operating for decades as regulated monopolies, they appear to have created an internal corporate culture which strongly resists external disclosure of network planning technical information. For the public interest to be served, that situation must be changed. If the corporate culture is too entrenched to change, then stronger nonstructural safeguards are needed to require disclosure by the Tier 1 companies of network architecture plans and technical descriptions for the new technologies.

To deal with the specific flaws experienced by GeoNet in the IILC and 120 day processes, GeoNet respectfully submits the following recommendations for near term relief which are intended to correct those flaws.

VII. RECOMMENDATIONS

The Commission has clearly stated that the IILC is the proper forum to address uniformity issues. The following recommendations are offered with the objective of making that forum more meaningful.

It is recommended that the Commission should monitor the IILC process to determine whether the process provides adequate protection for ESPs against dominance by the carriers, particularly with respect to the introduction of issues.

It is recommended that the Commission should review the practices of the Tier 1 companies with respect to disclosure of network architecture plans and technical descriptions relating to the deployment of new technologies, especially as those

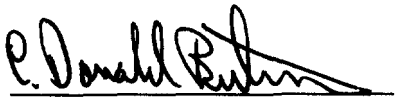
practices relate to participation in the IILC.

It is recommended that the Commission should review its requirements for enhanced services trials to determine when and how the Tier 1 companies should provide trial notices and technical information to those IILC task groups dealing with issues which relate to the technologies employed in the trials.

It is recommended that the Commission should review the record of IILC issues resolved to determine whether and when concensus on an issue is meaningful and under what conditions Tier 1 company participation is meaningful or merely superficial.

Respectfully submitted,

GeoNet Limited, L.P.

By: 

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